Clinical history of thrombotic events before diagnosis of chronic myeloproliferative neoplasms in triple negative patients

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Abstract

Thromboses are the most important preventable risk factors for morbidity and mortality in myeloproliferative neoplasms (MPN). We here performed a retrospective cross sectional study of patients with a diagnosis of Philadelphia negative MPN and a prior history of thrombosis, analyzed from electronic charts. Among a cohort of 260 patients with MPNs (78PV, 102ET, 80 MF), forty four were found triple negative for JAK-2, calreticulin and MPL gene mutations. Sixty-nine (26.54%) patients (29F, 40M) had a personal past clinical history of arterial or venous thrombosis. Among patients with thrombosis, 13(18.8%) cases (11ET, 2MF) were triple negative (median age:60 years). Most events, in particular in triple negative patients, occurred within 18 months before overt MPN. At the time of thrombosis diagnosis, only a minority of patients showed blood tests abnormalities suggestive of MPN or indicating hematological consultation(Figure). Triple negative MPNs may represent a distinct entity with peculiar clinical course and risk factors.